desired ground speed of the utility vehicle;

a creep speed control system operatively connected to said actuator and to said transmission, said <u>creep speed control</u> system converting movement of said speed control actuator to speed change of said transmission; and

a ground speed sensor that is signal-connected to said creep

speed control system, said ground speed sensor outputting a feedback signal

proportional to an actual ground speed of said utility vehicle, wherein said creep

speed control system utilizes said feedback signal from said ground speed

sensor to reduce a difference between said desired ground speed selected by

said creep speed control actuator and said actual ground speed.

2. (Currently Amended) The <u>utility vehicle</u> control system according to claim 1, wherein said transmission comprises a hydrostatic transmission having a variable displacement pump that includes a swashplate, the angular position of the swashplate controlling variable displacement pump capacity, the pump hydraulically connected to a hydraulic motor, and a hydraulic control system having a control spool valve, the movement of which causes pressurized hydraulic fluid to change the angle of said swashplate, and said control system comprises a mechanical link connecting said creep speed control actuator to said spool valve.



RECEIVED

MAR 1 9 2004

- 3. (Currently Amended) The <u>utility vehicle</u> control system according to claim 1, wherein said transmission comprises a reverser transmission having a clutch pack, and said control system comprises a controller and a position sensor connected to said lever to output a position signal to said controller, and a pressure control valve hydraulically connected to said clutch pack to actuate said clutch pack, said controller outputting a signal to said control valve to modulate clutch pressure according to actuator position.
- 4. (Currently amended) A utility vehicle control system for a utility vehicle having a forward-facing driving position and a rearward-facing seat, comprising:

a speed-controllable transmission operable to output power to drive a wheel:

a creep speed control actuator located adjacent to the rearwardfacing seat;

a creep speed control system operatively connected to said

actuator and to said transmission, said creep speed control system converting

movement of said speed control actuator to speed change of said transmission;

The control system according to claim 1, wherein said transmission comprises a hydrostatic transmission having a variable displacement pump that includes a swashplate, the angular position of the swashplate controlling variable displacement pump capacity, the pump hydraulically connected to a hydraulic motor, and a hydraulic control system having a servo piston housed in a servo

RECEIVED

MAR 1 9 2004

cylinder, and connected to said swashplate, movement of said piston within said cylinder causing a change of angle of said swashplate, and a forward pressure control valve and a reverse pressure control valve, said valves hydraulically connected to opposite sides of the servo piston respectively, said forward and reverse pressure control valves selectively energized to move said servo piston within said servo cylinder, and a controller, and said actuator comprises a position sensor to send an actuator position signal to said controller.

- 5. (Currently amended) The <u>utility vehicle</u> control system according to claim 1, wherein said actuator is located to be hand-activated by an operator.
- 6. (Currently Amended) The <u>utility vehicle</u> control system according to claim 1, wherein said <u>activator actuator</u> comprises a speed selector and a separate direction selector.
- 7. (Previously Amended) A utility vehicle control system for a utility vehicle having a forward-facing driving position and a rearward-facing seat, comprising:

a hydrostatic transmission operable to output power to drive a wheel;

a creep speed control actuator located adjacent to the rearwardfacing seat, said creep speed control actuator outputting a creep speed signal for forward or reverse direction;

RECEIVED

8

MAR 1 9 2004

a controller having an input for receiving said creep speed signal, and an output sending an output signal substantially proportional to said creep speed signal;

a first pressure control valve signal-connected to said controller for receiving said output signal and hydraulically-connected to said hydrostatic transmission, and energized to cause forward movement of said vehicle, a second pressure control valve signal-connected to said controller for receiving said output signal and hydraulically-connected to said hydrostatic transmission, and energized to cause reverse movement of said vehicle, said controller, by said output signal, energizing one of said first and second control valves corresponding to the speed signal of said actuator.

8. (Withdrawn) A utility vehicle control system for a utility vehicle having a forward-facing driving position and a rearward-facing seat, comprising:

a hydrostatic transmission operable to output power to drive a wheel;

a creep speed control actuator located adjacent to the rearwardfacing seat, said creep speed control actuator outputting a mechanical creep speed signal for forward or reverse direction;

a linkage having an input for receiving said mechanical creep speed signal, and a mechanical output sending a mechanical signal substantially proportional to said mechanical creep speed signal;

a mechanism having a mechanical input receiving said mechanical

RECEIVED

MAR 1 9 2004

signal and a mechanical output connected to said swashplate to change the angle of said swashplate according to said creep speed signal.

- 9. (Currently Amended) The <u>utility vehicle</u> control system according to claim 7, wherein said controller comprises a microcontroller.
- 10. (Currently Amended) The <u>utility vehicle</u> control system according to claim 7, wherein said transmission comprises a variable displacement pump and said first and second control valves comprise proportional control valves.
- 11. (Currently Amended) The <u>utility vehicle</u> control system according to claim 7, wherein said creep speed control actuator includes a potentiometer for providing said input signal, said input signal proportional to travel of said creep speed control actuator.
- 12. (Currently Amended) A method of controlling the speed of a transmission from a rear implement- facing seat, comprising the steps of:

while an operator is seated in the rear facing seat, moving a creep speed actuator to output a speed signal proportional to speed demand corresponding to a desired ground speed;

sending said output signal to a transmission of the vehicle to control speed of the transmission;

sensing an actual ground speed of said vehicle and modifying said

RECEIVED

MAR 1 9 2004

PATENT DEPT.

6

13. (Currently Amended) <u>A method of controlling speed of a transmission from a rear implement- facing seat, comprising the steps of:</u>

while an operator is seated in the rear facing seat, moving a creep speed actuator to output a speed signal proportional to speed demand;

sending said output signal to a transmission of the vehicle to control speed of the transmission;

The method according to claim 12, wherein said step of sending said output signal is further defined in that said transmission comprises a hydrostatic transmission having a variable displacement pump controlled for speed and direction by movement of a swashplate, and said swashplate is controlled by at least one proportional control valve, and said output signal is an electrical signal to said proportional control valve.

- 14. (Withdrawn) The method according to claim 12, wherein said step of sending said output signal is further defined in that said output signal is a mechanical signal to a servo system of the transmission.
- 15. (New) The method according to claim 13, comprising the further stop of sensing an actual ground speed of said vehicle and modifying said output signal to reduce a difference between said desired ground speed and said

MAR 1 9 2004

- 16. (New) The utility vehicle control system according to claim 7, wherein said hydrostatic transmission comprises a servo piston housed in a servo cylinder, said servo piston operatively connected to said swashplate wherein movement of said servo piston changes the angular position of said swashplate, said first pressure control valve and said second pressure control valve hydraulically connected to said servo cylinder on opposite sides of said servo piston.
- 17. (New) The utility vehicle control system according to claim 7, wherein:

said controller comprises a microcontroller;

said transmission comprises a variable displacement pump and said first and second control valves comprise proportional control valves;

said creep speed control actuator includes a potentiometer for providing said input signal, said input signal proportional to travel of said creep speed control actuator; and

said hydrostatic transmission comprises a servo piston housed in a servo cylinder, said servo piston operatively connected to said swashplate wherein movement of said servo piston changes the angular position of said swashplate, said first pressure control valve and said second pressure control valve hydraulically connected to said servo cylinder on opposite sides of said

RECEIVED

MAR 1 9 2004

servo piston.

- 18. (New) The utility vehicle control system according to claim 7, further comprising a ground speed sensor that is signal-connected to said controller, wherein said output signal is modified by said controller using a signal from said ground speed sensor, to achieve a desired ground speed selected by said creep speed control actuator.
- 19. (New) The utility vehicle control system according to claim 1, wherein said transmission comprises a hydrostatic transmission having a variable displacement pump that includes a swashplate, the angular position of the swashplate controlling variable displacement pump capacity, the pump hydraulically connected to a hydraulic motor, and a hydraulic control system having a servo piston housed in a servo cylinder, and connected to said swashplate, movement of said piston within said cylinder causing a change of angle of said swashplate, and a forward pressure control valve and a reverse pressure control valve, said valves hydraulically connected to opposite sides of the servo piston respectively, said forward and reverse pressure control valves selectively energized to move said servo piston within said servo cylinder, and a controller, and said actuator comprises a position sensor to send an actuator position signal to said controller.
 - 20. (New) The utility vehicle control system according to claim 19,

RECEIVED

MAR 1 9 2004

PATENT DEPT.

Q

wherein said actuator comprises a speed selector and a separate direction selector.

- 3
- 21. (New) The utility vehicle control system according to claim 20, wherein said speed selector and said direction selector are located to be hand-activated by an operator.
- 22. (New) The utility vehicle control system according to claim 4, wherein said actuator is located to be hand-activated by an operator.

RECEIVED

MAR 1 9 2004